

Monday, October 19, 2020

Attn: Ms. Jennifer Atkins AECOM 250 Apollo Drive Chelmsford, MA 01824

Project ID: GULF CHELSEA TERMINAL 60597375-0500

SDG ID: GCG97722

Sample ID#s: CG97722 - CG97723

This laboratory is in compliance with the NELAC requirements of procedures used except where indicated.

This report contains results for the parameters tested, under the sampling conditions described on the Chain Of Custody, as received by the laboratory. This report is incomplete unless all pages indicated in the pagination at the bottom of the page are included.

A scanned version of the COC form accompanies the analytical report and is an exact duplicate of the original.

If you are the client above and have any questions concerning this testing, please do not hesitate to contact Phoenix Client Services at ext.200. The contents of this report cannot be discussed with anyone other than the client listed above without their written consent.

Sincerely yours,

Phyllis/Shiller

Laboratory Director

NELAC - #NY11301

CT Lab Registration #PH-0618

MA Lab Registration #M-CT007 ME Lab Registration #CT-007

NH Lab Registration #213693-A,B

NJ Lab Registration #CT-003 NY Lab Registration #11301

PA Lab Registration #68-03530 RI Lab Registration #63

UT Lab Registration #CT00007

VT Lab Registration #VT11301



587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045 Tel. (860) 645-1102 Fax (860) 645-0823

Sample Id Cross Reference

October 19, 2020

SDG I.D.: GCG97722

Project ID: GULF CHELSEA TERMINAL 60597375-0500

Client Id	Lab Id	Matrix
OUTFALL 003	CG97722	SW DISCHARGE
TRIP BLANK	CG97723	SW DISCHARGE



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Analysis Report

October 19, 2020

FOR: Attn: Ms. Jennifer Atkins

AECOM

250 Apollo Drive

Chelmsford, MA 01824

Sample InformationCustody InformationDateTimeMatrix:SW DISCHARGECollected by:10/14/2014:55Location Code:AECOME-GULFReceived by:B10/15/2017:05

Rush Request: 72 Hour Analyzed by: see "By" below

P.O.#: 112185

<u>aboratory Data</u> SDG ID: GCG97722
Phoenix ID: CG97722

Project ID: GULF CHELSEA TERMINAL 60597375-0500

Client ID: OUTFALL 003

		RL/					
Parameter	Result	PQL	Units	Dilution	Date/Time	Ву	Reference
Oil and Grease by EPA 1664A	< 1.4	1.4	mg/L	1	10/16/20	MSF	EPA 1664
pH	8.06	1.00	pH Units	1	10/16/20 00:41	AP	SM4500-H B-11
Total Suspended Solids	4.7	3.3	mg/L	0.7	10/16/20	QH	SM 2540D-11
Semi-Volatile Extraction	Completed				10/15/20	P/CG	SW3520C
Aromatic Volatiles w/N	<u>apthalene</u>						
Benzene	ND	1.0	ug/L	1	10/16/20	МН	E624.1
Methyl t-butyl ether (MTBE)	ND	2.0	ug/L	1	10/16/20	МН	E624.1
Naphthalene	ND	1.0	ug/L	1	10/16/20	MH	E624.1
QA/QC Surrogates							
% 1,2-dichlorobenzene-d4	100		%	1	10/16/20	MH	70 - 130 %
% Bromofluorobenzene	99		%	1	10/16/20	MH	70 - 130 %
% Dibromofluoromethane	101		%	1	10/16/20	MH	70 - 130 %
% Toluene-d8	104		%	1	10/16/20	MH	70 - 130 %
Ethanol	ND	400	ug/L	1	10/16/20	МН	E624.1
Semivolatiles by SIM, F	PAH						
Benzo(a)pyrene	ND	0.02	ug/L	1	10/16/20	PS	E625.1
Naphthalene	ND	0.10	ug/L	1	10/16/20	PS	E625.1
QA/QC Surrogates							
% 2-Fluorobiphenyl	46		%	1	10/16/20	PS	40 - 140 %
% Nitrobenzene-d5	57		%	1	10/16/20	PS	40 - 140 %
% Terphenyl-d14	42		%	1	10/16/20	PS	40 - 140 %

Project ID: GULF CHELSEA TERMINAL 60597375-0500 Phoenix I.D.: CG97722

Client ID: OUTFALL 003

RL/

Parameter Result PQL Units Dilution Date/Time By

RL/PQL=Reporting/Practical Quantitation Level ND=Not Detected BRL=Below Reporting Level QA/QC Surrogates: Surrogates are compounds (preceeded with a %) added by the lab to determine analysis efficiency. Surrogate results(%) listed in the report are not "detected" compounds.

Comments:

The regulatory hold time for pH is immediately. This pH was performed in the laboratory and may be considered outside of hold-time

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Phyllis Shiller, Laboratory Director

October 19, 2020

Reviewed and Released by: Rashmi Makol, Project Manager



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Analysis Report

October 19, 2020

FOR: Attn: Ms. Jennifer Atkins

AECOM

250 Apollo Drive

Chelmsford, MA 01824

Sample Information **Custody Information** Date <u>Time</u> SW DISCHARGE Collected by: 10/14/20 Matrix: 8:00 Location Code: Received by: **AECOME-GULF** В 10/15/20 17:05 Standard

Rush Request: Analyzed by: see "By" below

aboratory Data

SDG ID: GCG97722

Phoenix ID: CG97723

GULF CHELSEA TERMINAL 60597375-0500 Project ID:

112185

Client ID: TRIP BLANK

P.O.#:

Parameter	Result	RL/ PQL	Units	Dilution	Date/Time	Ву	Reference
Aromatic Volatiles w/Na	pthalene						
Benzene	ND	1.0	ug/L	1	10/16/20	MH	E624.1
Methyl t-butyl ether (MTBE)	ND	2.0	ug/L	1	10/16/20	MH	E624.1
Naphthalene	ND	1.0	ug/L	1	10/16/20	MH	E624.1
QA/QC Surrogates							
% 1,2-dichlorobenzene-d4	100		%	1	10/16/20	MH	70 - 130 %
% Bromofluorobenzene	97		%	1	10/16/20	MH	70 - 130 %
% Dibromofluoromethane	99		%	1	10/16/20	MH	70 - 130 %
% Toluene-d8	102		%	1	10/16/20	MH	70 - 130 %
Ethanol	ND	400	ug/L	1	10/16/20	MH	E624.1
Naphthalene QA/QC Surrogates % 1,2-dichlorobenzene-d4 % Bromofluorobenzene % Dibromofluoromethane % Toluene-d8	ND 100 97 99 102	1.0	ug/L % % % %	1 1 1 1	10/16/20 10/16/20 10/16/20 10/16/20 10/16/20	MH MH MH MH	E624.1 70 - 130 % 70 - 130 % 70 - 130 % 70 - 130 %

RL/PQL=Reporting/Practical Quantitation Level ND=Not Detected BRL=Below Reporting Level QA/QC Surrogates: Surrogates are compounds (preceeded with a %) added by the lab to determine analysis efficiency. Surrogate results(%) listed in the report are not "detected" compounds.

Comments:

TRIP BLANK INCLUDED.

If you are the client above and have any questions concerning this testing, please do not hesitate to contact Phoenix Client Services at ext.200. The contents of this report cannot be discussed with anyone other than the client listed above without their written consent.

Phyllis Shiller, Laboratory Director

October 19, 2020

Reviewed and Released by: Rashmi Makol, Project Manager



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QA/QC Report

Parameter

Comment:

Comment:

October 19, 2020

Additional: LCS acceptance range is 85-115% MS acceptance range 75-125%.

QA/QC Data

RPD Blk Sample Dup Dup LCS LCSD LCS MS MSD MS Rec Result Blank RL Result RPD. % **RPD** % % **RPD** Limits Limits % QA/QC Batch 549674 (mg/L), QC Sample No: CG97009 (CG97722) **Total Suspended Solids** 100 7.30 97.0 85 - 115 QA/QC Batch 549676 (mg/L), QC Sample No: CG97194 (CG97722) Oil and Grease by EPA 1664A BRL 1.4 <1.4 <1.4 NC 95.0 92.0 85 - 115 20 Additional: MS acceptance range 75-125%. QA/QC Batch 549701 (pH), QC Sample No: CG97614 (CG97722) 0.30 98.8 85 - 115 20

SDG I.D.: GCG97722



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QA/QC Report

October 19, 2020

QA/QC Data

SDG I.D.: GCG97722

Parameter	Blank	BIk RL	LCS %	LCSD %	LCS RPD	MS %	MSD %	MS RPD	% Rec Limits	% RPD Limits	
QA/QC Batch 549613 (ug/	L), QC Sampl	e No: CG97289	(CG97722)								
Semivolatiles by SIM,	, PAH										
Benzo(a)pyrene	ND	0.20	70	91	26.1				40 - 140	20	r
Naphthalene	ND	0.50	82	80	2.5				40 - 140	20	
% 2-Fluorobiphenyl	75	%	65	72	10.2				40 - 140	20	
% Nitrobenzene-d5	86	%	81	87	7.1				40 - 140	20	
% Terphenyl-d14	95	%	78	92	16.5				40 - 140	20	
Comment:											
A LCS and LCS Duplicate w	ere performed	instead of a matrix	spike and matrix spike du	ıplicate.							
Additional 8270 criteria: 10% acceptance range for aqueo				ng as reco	overy is	at least	10%. (Ad	cid surro	ogates		
QA/QC Batch 549911 (ug/	L), QC Sampl	e No: CG97723	(CG97722, CG97723)								
<u>Volatiles</u>											
Benzene	ND	0.70	104	101	29	104	103	1.0	65 - 135	20	

V	o	ıa	IJ	ıe	S

Benzene	ND	0.70	104	101	2.9	104	103	1.0	65 - 135	20
Methyl t-butyl ether (MTBE)	ND	1.0	95	89	6.5	107	107	0.0	70 - 130	30
Naphthalene	ND	1.0	119	119	0.0	109	120	9.6	70 - 130	30
% 1,2-dichlorobenzene-d4	100	%	100	100	0.0	101	100	1.0	70 - 130	30
% Bromofluorobenzene	97	%	100	99	1.0	103	103	0.0	70 - 130	30
% Dibromofluoromethane	99	%	98	100	2.0	103	98	5.0	70 - 130	30
% Toluene-d8	102	%	100	100	0.0	99	100	1.0	70 - 130	30
Comment:										

A blank MS/MSD was analyzed with this batch.

QA/QC Batch 549910 (ug/L), QC Sample No: CG97723 (CG97722, CG97723)

<u>Oxygenates</u>

Ethanol ND 200 95 86 9.9 131 122 7.1 70 - 130

Comment:

A blank MS/MSD was analyzed with this batch.

If there are any questions regarding this data, please call Phoenix Client Services at extension 200.

RPD - Relative Percent Difference

LCS - Laboratory Control Sample

LCSD - Laboratory Control Sample Duplicate

MS - Matrix Spike

MS Dup - Matrix Spike Duplicate

NC - No Criteria

Intf - Interference

Phyllis/Shiller, Laboratory Director

October 19, 2020

m = This parameter is outside laboratory MS/MSD specified recovery limits.

r = This parameter is outside laboratory RPD specified recovery limits.

Monday, October 19, 2020

Sample Criteria Exceedances Report GCG97722 - AECOME-GULF

Criteria: None State: MA

RL Analysis SampNo Acode Phoenix Analyte Criteria Units

Phoenix Laboratories does not assume responsibility for the data contained in this exceedance report. It is provided as an additional tool to identify requested criteria exceedences. All efforts are made to ensure the accuracy of the data (obtained from appropriate agencies). A lack of exceedence information does not necessarily suggest conformance to the criteria. It is ultimately the site professional's responsibility to determine appropriate compliance.

^{***} No Data to Display ***



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Analysis Comments

October 19, 2020 SDG I.D.: GCG97722

The following analysis comments are made regarding exceptions to criteria not already noted in the Analysis Report or QA/QC Report: None.

Dat	Project P.O: 112185	S Sec	completed with	Bottle Quantities.	14000 1000		6 10 0x	3 3 1						MA Data Format	MCP Certification Excel	<u> </u>	GW-3		MWRA eSMART	cted: MA · surcharge applies
CHAIN OF CUSTODY RECORD 587 East Middle Tumpike, P.O. Box 370, Manchester, CT 06040 Email: info@phoenixlabs.com Fax (860) 645-0823	/ 60597375-0500	Report to: Jennifer Atkins	Invoice to: AECOM	QUOTE # AE012319RM	Analysis	ix de la constantina della con	10 10 10 10 10 10 10 10 10 10 10 10 10 1	× ×	×					Date: Time: RI CT	A /235 Direct Exposure (Residential)	البال	Other GA Mobility	· See	ard / sac	State where samples were collected:
STOTAN .					tification Date: 10-	Vater www=Waste Water =Solid W=Wipe OIL=Oil	Sample Date Time Matrix Sampled Sampled	10-4-01 145S	0					Da					_ 3	
PHOENIX Environmental Laboratories, Inc.	AECOM	250 Apollo Drive	Chelmsford, MA 01824	Jennifer Atkins	Cilent Sample - Information - Identification	Matrix Code:	Customer Sample Sample Identification Matrix	Outfall 003	Trip Black 1					Accepted by:		V.	Comments, Special Requirements or Regulations:	ron 3 Day 7	100 Sampic	
PHC Environme	Customer:	Address:	- 1	•	Sampler's Signature	Matrix Code: DW-Drinking Water RW-Raw Water SE B-Bulk L-Liquid	PHOENIX USE ONLY SAMPLE #	\$111B	Erub	cold				Relinquisted by:	Jan J		Comments, Special	* Picase	7	